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LIFE STRESS AND COPING SKILLS IN RELATION TO PERFORMANCE AND OR--ETC(U)  
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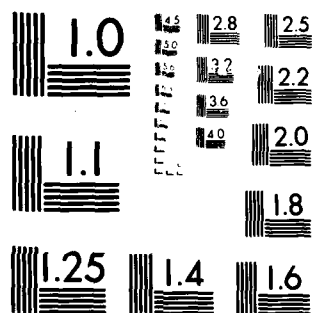
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This is the Final Report of a research project carried out between June 1, 1975 and March 31, 1980. The research dealt with the relationships of individual differences, experimental conditions, and training in stress-coping skills to performance. Fourteen Technical Reports and several articles resulted from the project.		

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Work on this project was carried out between June 1, 1975 and March 31, 1980. The research had two dimensions. One group of studies was primarily concerned with assessing life stress and organizational stress. The other group involved the manipulation of experimental variables. These variables fell into two groups, experimentally manipulated stress-arousing interventions and programs aimed at strengthening stress-coping skills.

Results of the research have been reported in 14 Technical Reports. Nine of the Technical Reports (usually in slightly revised form) have been published as articles in scientific journals and books. Two articles are in press. An additional article which had not previously appeared as a Technical Report was published in a scientific journal. The Index to Technical Reports lists the Technical Reports. The List of Publications contains the references for published papers.

Two assessment devices were developed under the contract, the Life Experiences Survey (LES) and the Organizational Change Inventory (OCI). The LES is designed to assess negative and positive changes occurring in the personal life of the individual during the recent past. The OCI performs a similar function for organizational changes in the work situation. Research on the LES has demonstrated that the measure of negative life events is of much greater predictive value than is the measure of positive events. People who have experienced many negative life events in the recent past are more susceptible to anxiety, depression, and performance disruption under stress. Furthermore, an important factor in how life events affect behavior is the way they are cognitively processed by the individual. Several studies have identified moderator variables (such as sensation seeking) that influence this process and the role of negative life events in behavior. While less evidence is available concerning the OCI than the LES, the data gathered

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suggest that a pile-up of organizational stressors has effects similar to a pile-up of personal stressors. The following points summarize major findings concerning assessment studies related to this contract:

1. Negative life events as measured by the LES (e.g., death of a loved one) exert a strong undesirable impact over one's behavior and thought. Positive events (e.g., getting a large salary increase) have no such effect. Our work and the findings of others indicate that a build-up of negative events influences automobile accidents, morale on the job, various types of psychological distress (particularly depression and anxiety), and seeking help for health problems.
2. A build-up of negative events on the job (e.g., trouble getting along with one's supervisor) as assessed by the OCI is correlated with lowered job satisfaction in a variety of areas, not just in the area of one's relationship with the supervisor.
3. The LES and OCI possess acceptable levels of reliability and internal consistency.
4. The LES is relatively insensitive to the mood state of the subject at the time of completing the questionnaire. This is desirable since it is important that a measure of life change reflect the changes that have occurred in the recent past rather than the mood of the subject during test taking.
5. The tendency toward sensation seeking or arousal seeking functions as a moderator variable in relation to life stress. Subjects who have experienced a high degree of life stress and who are low in sensation seeking are more likely to show personal discomfort or lowered performance than high life stress subjects who are high in sensation seeking. Low sensation seekers are persons who emphasize the need for

stability in their lives and who tend not to seek new forms of stimulation and excitement. This suggests that low sensation seekers who have experienced recent negative life changes are not likely to be the best candidates for performing dangerous or sensitive jobs that must be carried out under novel or stressful conditions. In addition to identifying sensation seeking as a moderator variable, there is also evidence that Internal/External locus of control under certain circumstances moderates the effects of life stress.

Research on the experimental study of the effects of stress has related pre-performance individual difference indices to performance on intellectual tasks under experimental stress-arousing and control conditions. The individual difference variable studied most systematically was test anxiety. Groups scoring high in test anxiety performed less effectively under stress than did less anxious groups. In addition, high test anxious subjects who perform under stressful conditions experience exceptionally high levels of cognitive interference. There is increasing evidence that personality characteristics interact with situational variables in influencing performance.

Research aimed at fostering effective stress-coping skills has been a major focus of work related to this contract. Two types of studies have been carried out: (1) laboratory studies, and (2) field studies. The field studies, while incorporating experimental controls, were particularly directed to meeting the needs of groups that experience specific types of stress. For example, one group consisted of college students concerned about academic stressors such as taking tests and being evaluated. Another group consisted of students at a Police Academy. In each of the populations studied, anger was one of the strongest reactions to stress and frustration. In every population with which we have worked (teachers and social workers, as well as the groups mentioned above), about 60 percent of the subjects, when asked about a recent stressor,

described a situation in which they felt very angry. They described anger as the most disturbing emotional experience they had had in the recent past.

The main finding of the stress-coping studies is that short, targeted training programs can decrease cognitive interference and increase effectiveness when performance is required under stressful conditions. A particularly useful ingredient of these programs is modeling in which subjects have the opportunity to observe adaptive behavior. This modeling can be accomplished either through live or videotaped demonstrations. Two additional useful ingredients are behavior rehearsal and information about (1) what stress does to people, and (2) what one can do to reduce its impact.

The Technical Reports that have been written describe in detail the work conducted under this contract. The research performed yielded information about what stress does to people and what they can do to minimize its deleterious effects. The Technical Reports also contain suggestions for needed further inquiry. The Technical Report by I. G. Sarason and B. R. Sarason (SCS-LS-009) and two Technical Reports by J. H. Johnson and I. G. Sarason (SCS-LS-006 and SCS-LS-007) deal particularly with theoretical issues concerning stress and directions for future research.



# Index to Technical Reports

SCS-LS-001	The Life Experiences Survey: Preliminary Findings Irwin G. Sarason & James H. Johnson	5/1/76
SCS-CS-001	Coping with Academic Stressors: A Pilot Study Irwin G. Sarason & James H. Johnson	12/20/76
SCS-CS-003	The Test Anxiety Scale: Concept and Research Irwin G. Sarason	5/3/77
SCS-CS-004	Test Anxiety and the Passage of Time Irwin G. Sarason & Rick Stoops	5/6/77
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SCS-LS-003	Life Stress, Depression, and Anxiety: Internal-External Control as a Moderator Variable James H. Johnson & Irwin G. Sarason	11/1/77
SCS-CS-005	Helping Police Officers Cope with Stress: A Cognitive- Behavioral Approach Irwin G. Sarason, James H. Johnson, John P. Berberich, & Judith M. Siegel	2/1/78
SCS-LS-004	Life Stress, Organizational Stress, and Job Satisfaction Irwin G. Sarason & James H. Johnson	3/15/78
SCS-LS-005	Mood States and the Reporting of Life Changes Judith M. Siegel, James H. Johnson, & Irwin G. Sarason	4/1/78
SCS-LS-006	Recent Developments in Research on Life Stress James H. Johnson & Irwin G. Sarason	9/15/78
SCS-LS-007	Moderator Variables in Life Stress Research James H. Johnson & Irwin G. Sarason	2/15/79
SCS-LS-008	Life Stress, Self-Preoccupation, and Social Supports Irwin G. Sarason	4/15/79
SCS-LS-009	The Importance of Cognition and Moderator Variables in Stress Irwin G. Sarason & Barbara R. Sarason	9/15/79
SCS-LS-010	Personality and Selective Attention Stevan Lars Nielsen & Irwin G. Sarason	3/28/80

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